Uniden Engineering Services 8707 North By Northeast Blvd. Suite 200 Fishers, IN 46038 Phone (317) 579-1300 Fax (317) 579-1304

uniden°

December 21, 1993

Mr. William F. Caton Secretary Federal Communications Commission 1919 M Street, N.W. Washington, D.C. 20554

RE: ET Docket No. 93-235

Reply Comments

Dear Mr. Caton:

Attached, you will find Uniden's Reply Comments to the above referenced Docket. In addition to the Original, I have attached nine other copies pursuant to the requirements stated in 47 CFR 1.419(b).

Also, I have included a copy identified as "DUPLICATE" which I would appreciate if this could be stamped and returned in the envelope attached.

A Certificate of Service list is attached to each copy of the attached Reply Comments which idenfify those parties who filed Comments in this proceeding. This list was derived from the information on file at the RIPS terminal as of December 10, 1993.

Thank you for your consideration in this matter. Please contact the undersigned if there are any questions.

Sincere regards,

James R. Haynes

Chief Engineer

encls.

Inti 5.5 1883

Brussels London

ORIGINAL

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

In the matter of

Amendment of Parts 15 and 90 of the Commission's Rules to Provide Additional Frequencies for Cordless Telephones

ET Docket No. 93-235 RM-8094

REPLY COMMENTS OF UNIDEN AMERICA CORPORATION

(hereinafter "Uniden") Uniden America Corporation respectfully submits its Reply Comments to captioned Notice of Proposed Rule Making ("NPRM") whereby the Commission is proposing to add 15 new channels to the existing 10 channel cordless telephone service. new channels, made up of 30 specific frequencies, spectrally located in the vicinity of 44/49 MHz bands. NPRM identifies these frequencies as being suitable for sharing between the primary users, the Private Land Mobile Radio Service ("PLMRS"), and the secondary cordless telephone service operating under Part 15 of the Commission's rules. If adopted, the new cordless telephone will continue to be an affordable consumer staple, and at the same time, will operate with no discernable degradation to the PLMRS.

INTRODUCTION

2. Uniden has examined all Comments filed in response to this proceeding as of December 8, 1993. Of the fifteen commenters, it should be noted that the majority supported the NPRM, almost to the letter. The dissenters can be divided into two categories. The first are those who believe that the proposed cordless telephones will either cause interference to, or receive interference from, PLMRS type devices. The second are those who believe that television receivers will be subjected to an unacceptable level of interference from the proposed cordless telephones. We will respond to both categories, although there does not appear to be a single word of substantiating data that support the arguments objecting to the proposals detailed within the NPRM.

INTERFERENCE WITH PRIVATE LAND MOBILE RADIO SERVICES

3. The Utilities Telecommunications Council (UTC), the Forest Industries Telecommunications (FIT) and the American Petroleum Institute (API) argue that cordless telephones will cause serious interference to their communications systems if allowed to operate under the rules proposed in the NPRM. It

should be noted that these collective Comments were not supported with any test data, or any other demonstrable technical analysis. To the contrary, they were filled with conjectures and hypothetical cases which, in Uniden's opinion, are not relevant. They failed to acknowledge or address the fact that cordless telephones transmit at power levels of only 25 to 30 microwatts. This equates to received signal strengths at or below the noise floor of most commercial communications systems. In portable and mobile installations, when the separation distance between cordless telephone and the PLMRS radio is greater than 50 to 100 feet, the man-made radio noise from automotive electrical systems and other sources, will typically be greater that the received energy from a cordless telephone. Notwithstanding, the interference avoidance burden is mandated in the NPRM to be the responsibility of the cordless telephone manufacturer to design circuitry that inhibit communications when cochannel signals are present.

4. In the Comments filed by Uniden, we stated that we are manufacturers of products that are under the regulations of both FCC Part 15 and Part 90. As a further comment, we would like to point out that Uniden has stopped production of all Part 90 communications equipment that operate in the bands

affected by this action. The reason is that the purchasing trends, of those customers who once purchased this type of equipment, have shifted towards higher frequency systems employing more sophisticated trunking technology. The facts and figures showing future usage of the affected radio spectrum was not mentioned in any of the dissenting Comments.

- 5. FIT commented that cordless telephone usage consisted of "long social visits mostly of little importance on low power devices". API used the words "casual chatting" in their description. Uniden believes that both of these assessments, depicting the utility of cordless telephones, are drastically flawed. One might reflect upon the elderly or the non-ambulatory person whose only means to contact the outside world, such as emergency services or family, may be through their cordless telephone.
- 6. UTC mentioned alternative frequency bands that could be used for cordless telephones. Uniden acknowledges that there are other areas of the radio frequency spectrum where more sophisticated cordless telephones are being developed; however, these are the higher priced products, typically three to four times the price of the current 46/49 MHz types. Therefore, we believe that there will continue to be a need

for an affordable cordless telephone for the foreseeable future and that the frequencies proposed by the Commission are the best choices.

INTERFERENCE WITH TELEVISION RECEIVERS

- 7. Zenith Electronics Corporation ("Zenith"), along with the Association for Maximum Service Television, Inc. ("MSTV"), and the Public Broadcasting Service ("PBS"), oppose the NPRM on the grounds that they believe the proposed cordless telephones will cause interference to television reception. Again, as in the case of the other dissenters, not one exhibit, containing factual technical data, was presented.
- 8. To the contrary, it is significant to call attention to the Comments filed by the Consumer Electronics Group of the Electronic Industries Association ("EIA/CEG") that stated "Tests conducted by an EIA/CEG member, at the suggestion of EIA's Video Systems Engineering Committee (R-4), have revealed that the potential for interference is negligible, except where the cordless telephone is quite close to the television set". Over a year ago, Uniden conducted informal testing with the same results.

- 9. In December, 1992, the TIA petition, which was the basis for the NPRM, was discussed in detail with the EIA's Video System Engineering Committee (R-4). Both Thomson Consumer Electronics, Inc. ("Thomson") and EIA/CEG, who have a vested interest in the television market, offered their support to the NPRM with condition that a "cautionary note" be supplied with each cordless telephone. The wording of this note would alert the user that "some cordless telephones operate at frequencies that may cause interference to nearby TVs and VCRs". It further provided instructions on how to minimize or prevent such interference by relocating the cordless telephone base unit away from the television receiver.
- 10. Uniden noted that only one television manufacturer, Zenith, filed Comments in opposition to the NPRM. Several manufacturers of cordless telephones also manufacture television receivers, and without exception, none of them filed Comments in opposition. This is an important fact in that these manufacturers obviously believe that the potential for interference is negligible; otherwise, the cordless telephones that they produce would interfere with the television receivers that they also produce.

CONCLUSION

11. Uniden reaffirms its full support to the proposed addition of the 30 new frequencies for cordless telephones. Based upon the review of the 14 sets of Comments filed by other parties, the opinions submitted in our original Comments to this NPRM remain unchanged. Further, we oppose the suggestion that Cobra made in regard to a "6 to 12 month period after the final Report and Order, instead of 30 days, before the rules would be effective". Uniden firmly believes that the Commission should move expeditiously in issuing a Report and Order in this proceeding as soon as possible which would adopt the Rules as proposed in the NPRM.

Respectfully submitted,

James R. Haynes

Chief Engineer

Uniden America Corporation

Engineering Services Office 8707 North By Northeast Blvd. Fishers, Indiana 46038

Tel. (317) 579-1300

Fax. (317) 579-1304

Dated: December 21, 1993

CERTIFICATE OF SERVICE

I, James R. Haynes, hereby certify that pursuant to the requirements in 47 CFR 1.405(b), copies of the foregoing Reply Comments of Uniden America Corporation have been served to the parties listed below.

Lames R. Haynes

December 21, 1993

Jeffrey L. Sheldon, Esquire Utilities Telecommunications Council 1140 Connecticut Avenue, N.W. Suite 1140 Washington, D.C. 20036

Gregory M. Schmidt, Esquire Covington & Burling 1201 Pennsylvania Avenue, N.W. P.O. Box 7566 Washington, D.C. 20044

Paula A. Jameson Senior Vice President Public Broadcasting Service 1320 Braddock Place Alexandria, Virginia 22314

John C. Thomas AB8Z 7911 Dartworth Dr. Parma, Ohio 44129-3929

James H. Baker Executive Vice President Forest Industries Telecommunications 871 Country Club Road, Suite A Eugene, OR 97401-2200 Wayne V. Black Keller and Heckman for The American Petroleum Institute 1001 G Street, N.W. Suite 500 West Washington, D.C. 20001

Christopher D. Imlay, Esquire Booth, Freret & Imlay 1233 20th Street, N.W. Suite 204 Washington, D.C. 20036

Jessie M. Slayton Manager, Regulatory Affairs Radio Shack A Division of Tandy Corporation 1400 One Tandy Center Ft. Worth, Texas 76102

Charles H. Helein, Esquire Helein, Waysdork & Mandigo, P.C. 1850 M Street, N.W. Suite 550 Washington, D.C.20036

Wray C. Hiser
Thomson Consumer Electronics, Inc.
1200 19th Street, N.W.
Suite 601
Washington, D.C. 20036

Stephen Sigman
VP Consumer Affairs
Zenith Electronics Corporation
1000 Milwaukee Avenue
Glenview, IL 60025

Barbara N. McLennan Staff Vice President Consumer Electronics Group Electronic Industries Association 2001 Pennsylvania Ave., N.W. Washington, D.C. 20006-1813 Max Rogers Chief Engineer Cobra Electronics Corp. 6500 West Cortland Street Chicago, IL 60635

Francine J. Berry, Esquire American Telephone and Telegraph Room 3244J1 295 North Maple Avenue Basking Ridge, New Jersey 07920

Eric J. Schimmel
Vice President
Telecommunications Industry Association
2001 Pennsylvania Avenue, N.W.
Suite 800
Washington, D.C. 20006-1813